

## PATENT ABSTRACTS OF JAPAN

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(71)Applicant : SONY CORP

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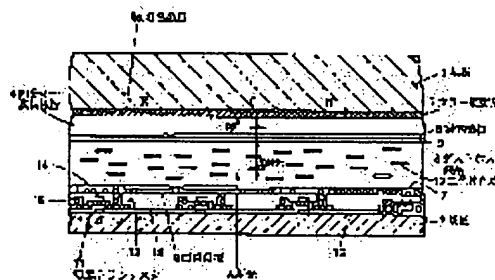
(72)Inventor : HAYASHI HISAO  
 SATO YASUNORI

## (54) COLOR REFLECTION TYPE GUEST-HOST LIQUID CRYSTAL DISPLAY DEVICE

## (57)Abstract:

PROBLEM TO BE SOLVED: To improve the utilization efficiency of incident light of a color reflection type guest-host liquid crystal display device and to simplify the structure thereof.

SOLUTION: This color reflection type guest-host liquid crystal display device has a pair of upper and lower substrates 1, 2, guest-host liquid crystals 3, a quarter-wavelength plate layer 4 and a color reflection layer 5. The substrate 2 on the lower side exists on an incident side and pixel electrodes 6 are formed thereon. The substrate 1 on the upper side exists on an opposite side and counter electrodes 8 are formed thereon. This substrate is joined to the substrate 2 on the lower side via a spacing and matrix-like pixels are regulated between both electrodes 6 and 8 disposed to face each other. The guest-host liquid crystals 3 contain dichromatic dyestuff 10 and are held in the spacing between both substrates. The quarter-wavelength plate layer 4 is interposed between the substrate 1 on the opposite side and the guest-host liquid crystals 3. The color reflection layer 5 is interposed between the substrate 1 on the opposite side and the quarter-wavelength plate layer 4 and reflects the incident light past the quarter-wave plate layer 4 selectively in wavelength in a pixel unit, thereby enabling color display.



## LEGAL STATUS

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